

## ABSTRACT

A process for mounting a semiconductor device and a mounting apparatus whereby electrodes of a fine-pitch semiconductor device and a wiring board can be surely connected to each other. A process for mounting a semiconductor device by electrically connecting an electrode of the semiconductor device 4 to an electrode of a wiring board by using an anisotropic conductive adhesive film having conductive particles dispersed in an insulating adhesive, which process comprising: the step of tentatively thermocompression bonding a conductive particle-free filmy insulating adhesive onto a wiring board 22 to thereby form an insulating adhesive layer 23; the step of forming a concave 23a of a predetermined size in said insulating adhesive layer 23 by using a compression bonding head 2 provided with a pressing chip 21 at a predetermined position; the step of putting in the concave 23a of said insulating adhesive layer 23 an anisotropic conductive adhesive film of a predetermined size; and the step of mounting a predetermined IC chip 11 at a predetermined position of the compression bonding head 2 and then positioning said IC chip 11 and thermocompression bonding to said wiring board 22.